ORDER NO. GAD8605567C1
A1

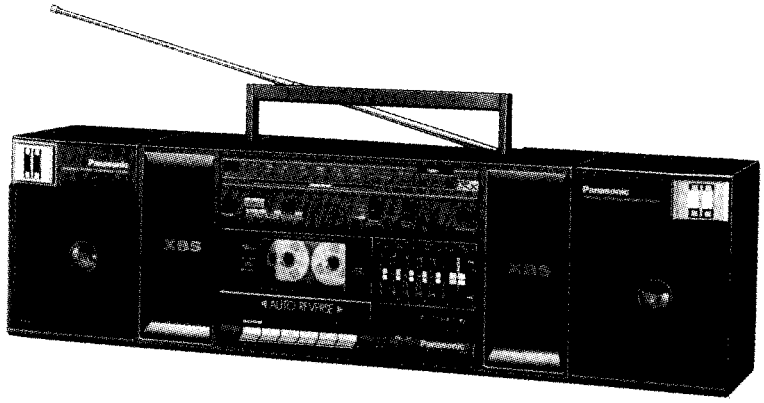
Service Manual

Radio Cassette

Portable Stereo Component System

RX-C38

(Black)



This is the Service Manual for the following area.

M ···For U.S.A.

C ···For Canada.

RX-C38 MECHANISM SERIES

■ SPECIFICATIONS

General:

Power Requirement:	AC; 120V, 60Hz Battery; 9V (six "D" Size Flashight Batteries) (Panasonic UM-1 or equivalent)
Power Consumption:	23W (AC only)
Power Output:	15W...RMS (max.)
Speaker:	Woofer; 5" (12cm) PM Dynamic Speaker (3Ω) Tweeter; $^3/_4$" (2cm) Ceramic Speaker (1kΩ)
Extra Bass Speaker:	$2^5/_{16}$"(6cm)×$5^1/_8$"(13cm) speaker ×2 (8Ω)
Input:	LINE IN; sensitivity 200mV/50kΩ over DC IN; 9V
Output:	HEADPHONES; 32Ω (8~50Ω) φ3.5
Dimensions:	Total Size $26^1/_8$"(W)×$7^1/_4$"(H)×$6^7/_{16}$"(D) (664×184×164)mm Main Unit $16^3/_{16}$"(W)×$7^1/_4$"(H)×$6^7/_{16}$"(D) (411×184×164)mm Speaker Box $5^5/_{16}$"(W)×$7^1/_4$"(H)×$5^3/_{16}$"(D) (135×184×132)mm
Weight:	10lb2.3oz (4.6kg) without batteries

Radio Section:

Radio Frequency Range:	FM; 88~108MHz AM; 525~1610kHz
Intermediate Frequency:	FM; 10.7MHz AM; 455kHz
Sensitivity:	FM; 3.2μV/50mW output (−3dB Limit) AM; 100μV/m/50mW output

Tape Deck Section:

Frequency Response:	100~7,000Hz
Recording System:	DC bias, MAGNET erase
Tape Speed:	17/8ips (4.8cm/s)
Track System:	4-track 2 channel stereo recording and playback

Weights and dimensions shown are approximate.
(Les poids et dimensions metiones sont approximatifs.)
Design and specifications are subject to change without notice.

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SAFETY PRECAUTIONS (For U.S.A.)

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, sheilds, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

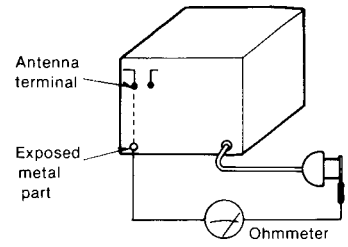


Fig. 1

Resistance = 3MΩ—5.2MΩ

INSULATION RESISTANCE TEST (For U.S.A.)

1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screwheads, antenna, control shafts, handle brackets, etc. Equipment with antenna terminals should read between 3MΩ and 5.2MΩ to all exposed parts*. (Fig. 1) Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig. 2)
   * **Note:** Some exposed parts may be isolated from the chassis by design. These will read infinity.
4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and rechecked before it is returned to the customer.

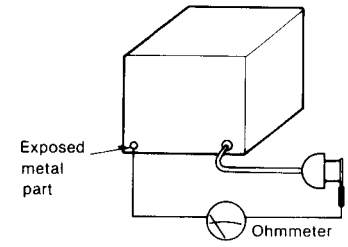
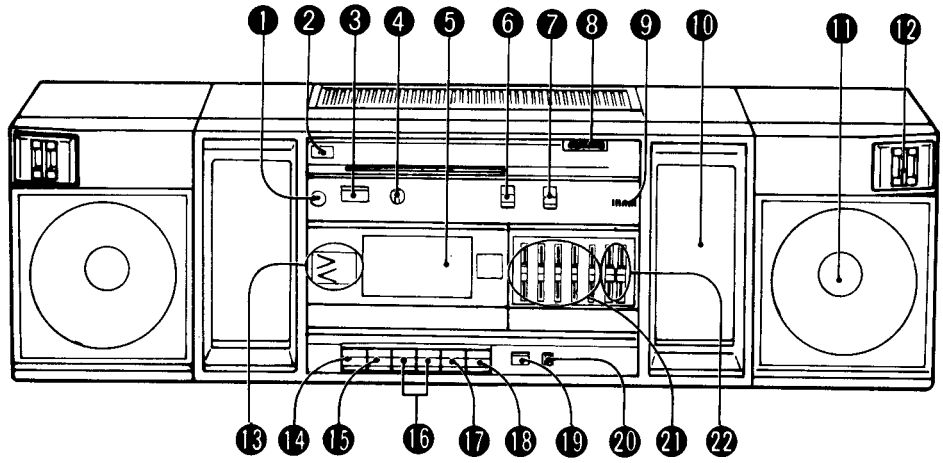


Fig. 2

Resistance = Approx ∞

LOCATION OF CONTROLS AND COMPONENTS



■ Extra Bass System

When the Extra Bass Switch is set to "ON", the dynamic low frequency ranges are boosted. Adjust the level by using the Extra Bass Control.
Using this system with Graphic Equalizer helps you to get more dynamic sounds.

Notes:

- The Extra Bass System effect may be different according to the program content of the music tape.
- When you playback the music tape which was recorded with a high level, the playback sound may be distorted. In this case, adjust with Extra Bass Control.
- When using with headphones, this system will not change to the headphones mode. (The extra bass sound will be heard from the Extra Bass Speaker.) So turn off the Extra Bass Switch.

*1 When the tape is caught in the pinch roller, etc. release the tape by tuning the pulley on the motor with the screwdriver in the direction of the arrow.

BATTERY SERVICE LIFE

UM-1 (D-size) Batteries
Approx. 14.5 hours of recording (EIAJ)
Approx. 6.5 hours of playback (EIAJ) with volume set at 7.5 position

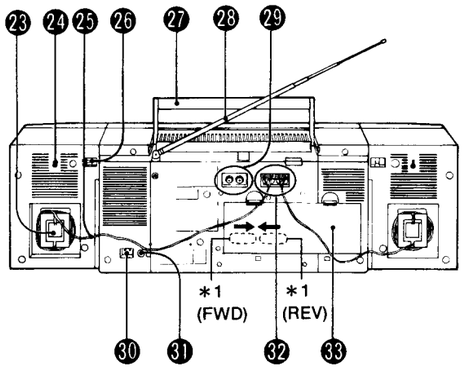
The above battery service life is measured according to the conditions set forth by EIAJ (Electronic Industries Association of Japan). As the battery service life varies with the method of operation and environmental conditions, use these values as reference.

D

❶ Headphones Jack (PHONES) φ3.5, 32Ω (8~50Ω)

When using the headphones (EAH-S10, optional), avoid listening to sound for a long period of time at excessive volume levels, which may injure your ears.

❷ FM Stereo Indicator (FM STEREO)
❸ Extra Bass Switch (XBS)
❹ Extra Bass Control
❺ Cassette Compartment
❻ Function Selector (SELECTOR)
❼ Band Selector (BAND)
❽ Tuning Control (TUNING)
❾ Built-in Microphone (MICROPHONE)
❿ Extra Bass Speakers, ($2^5/_{16}\times5^1/_8$") 8Ω



⓫ Speakers (Woofer), (5") 3Ω
⓬ Speakers (Tweeter), ($^3/_4$") 1kΩ
⓭ Direction/Power/Battery Check Indicators
⓮ Record Button (● RECORD)
⓯ Playback Button (▶ PLAY)
⓰ Fast Buttons (◀◀ · ▶▶ FAST)
⓱ Stop/Eject Button (■/▲ STOP/EJECT)
⓲ Pause Button (❚❚ PAUSE)
⓳ Direction Selector (DIRECTION)
⓴ Reverse Mode Selector (REVERSE MODE)
㉑ Graphic Equalizer Controls (5-BAND GRAPHIC EQUALIZER)
㉒ Volume Controls (VOLUME)

㉓ Speaker Cable Compartments
㉔ Speaker Wall Mounts
㉕ Speaker Cables
㉖ Speaker Release Levers (RELEASE)
㉗ Handle
㉘ Telescopic Antenna
㉙ Line Input Jacks (LINE IN)
㉚ AC Socket (AC IN~)
㉛ DC Input Jack (DC IN 9 V ⊖-⊙-⊕)
㉜ Speaker Terminals (SPEAKER IMP 3–8 Ω)
㉝ Battery Compartment

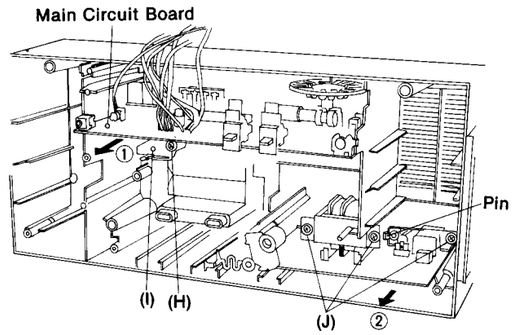


Fig. 5

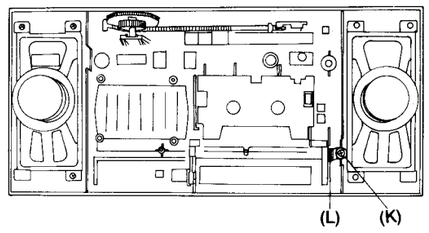


Fig. 7

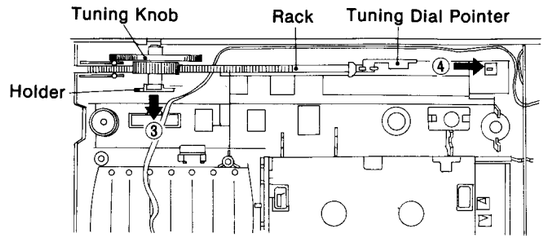


Fig. 6

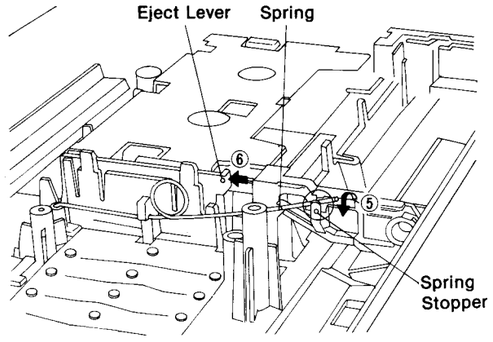


Fig. 8

DISASSEMBLY INSTRUCTIONS

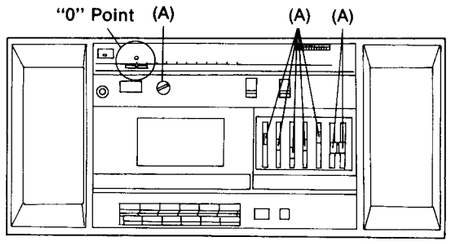


Fig. 1

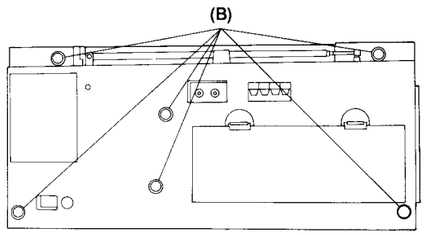


Fig. 2

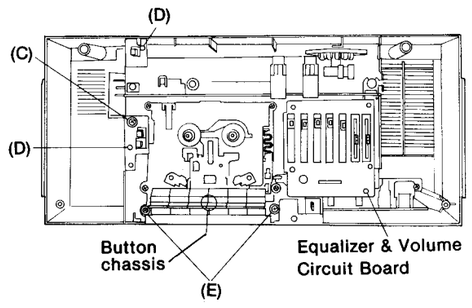


Fig. 3

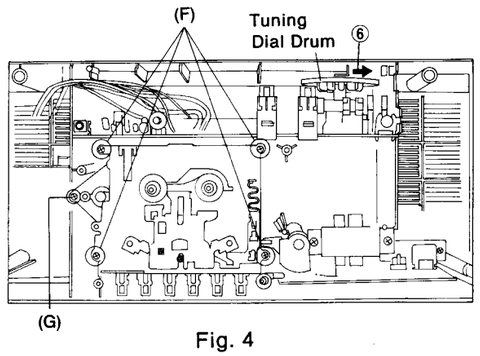


Fig. 4

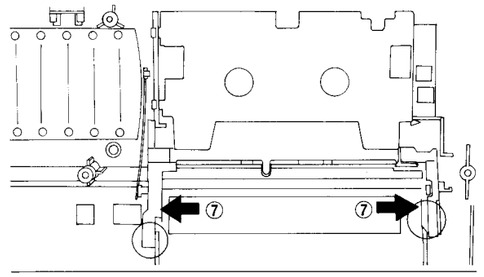


Fig. 9

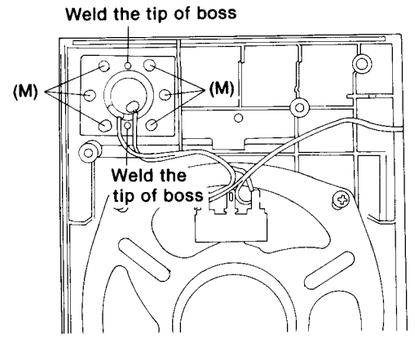


Fig. 10

Ref. No.	Shown in Fig. —.	To remove —.	Remove —.
1	1	Front Cabinet Ass'y	Knob .....(A)×8
2	2		Screw (3×50)mm .....(B)×6

▼ Be sure to fold at the (▼) mark so that mark is on the outside.

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(*1) W

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AST)
STOP/EJECT)
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REVERSE MODE)
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ALIZER)
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(RELEASE)
)
⊖-⊙-⊕)
AKER IMP 3–8 Ω)

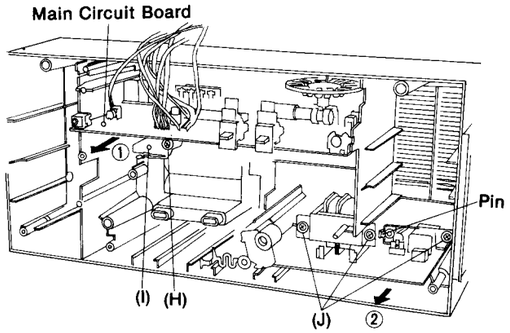


Fig. 5

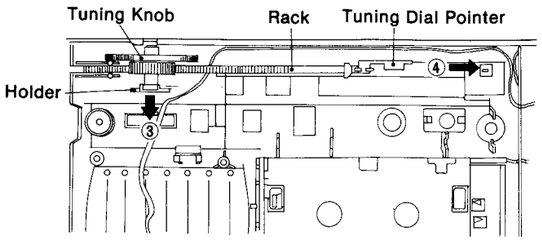


Fig. 6

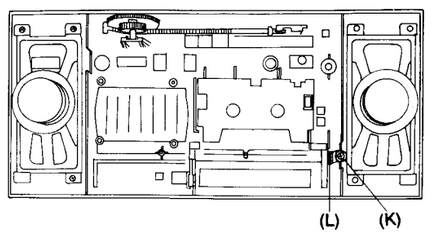


Fig. 7

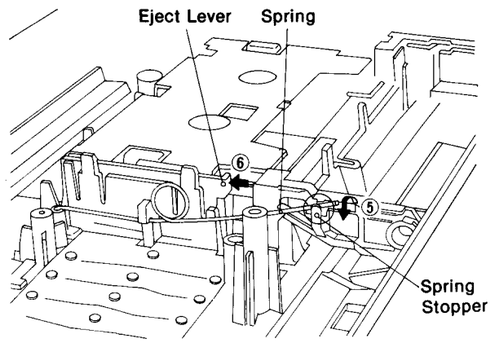
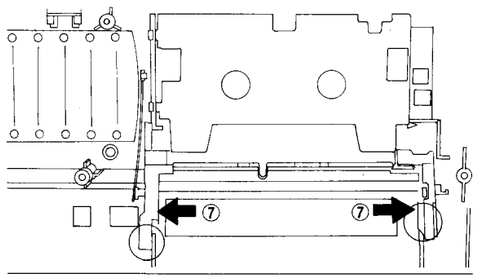


Fig. 8



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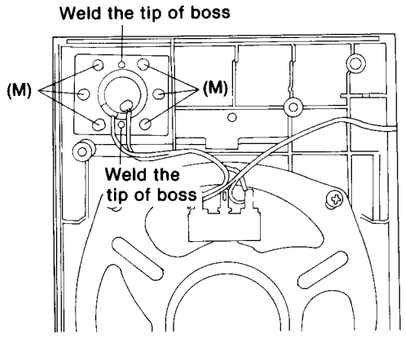

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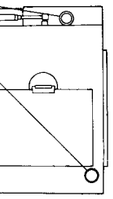
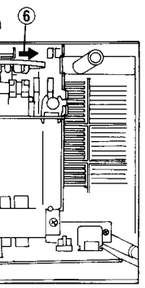




Ref. No.	Shown in Fig. —.	To remove —.	Remove —.
1	1	Front Cabinet Ass'y	Knob .....(A)×8
2	2		Screw (3×50)mm .....(B)×6

Ref. No.	Shown in Fig. —.	To remove —.	Remove —.
3	3	Mechanism	Remove the Equalizer & Volume Circuit Board
4			Screw (3×10)mm .....(C)×1
5			LED Circuit Board .....(D)×2
6			Screw (3×10)mm .....(E)×2
7			Remove the Button Chassis
8	4		Screw (3×25)mm .....(F)×4
9			Screw (3×10)mm .....(G)×1
10	5	Main Circuit Board	Screw (3×10)mm .....(H)×1
11			Record Lever .....(I)×1
12			Pull the Main Circuit Board in the direction of the arrow ①.
13		Power Supply Circuit Board	Screw (3×10)mm .....(J)×3
14			Pull the Power Supply Circuit Board in the direction of the arrow ②.
15	6	Tuning Knob & Tuning Dial Pointor	Push the Holder in the direction of the arrow ③. And remove the Tuning Knob.
			Pull out Rack in the direction of arrow ④.
16	7	Cassette Cover	Screw (3×8)mm .....(K)×1
			Gear Holder .....(L)×1
17	8		Remove the Spring in the direction of arrow ⑤.
			Push the Eject Lever in the direction of arrow ⑧.
18	9		Push the Arm in the direction of arrows ⑦ to remove it.
19	10	Tweeter (*1)	Cut the tip of boss .....(M)×6

(*1) When replacing the tweeter, attach the tweeter to the speaker cabinet by welding it to the remainder of the boss.

■ MEMO

▼ Be sure to fold at the (▼) mark so that mark is on the outside.

RX-C38 RX-C38

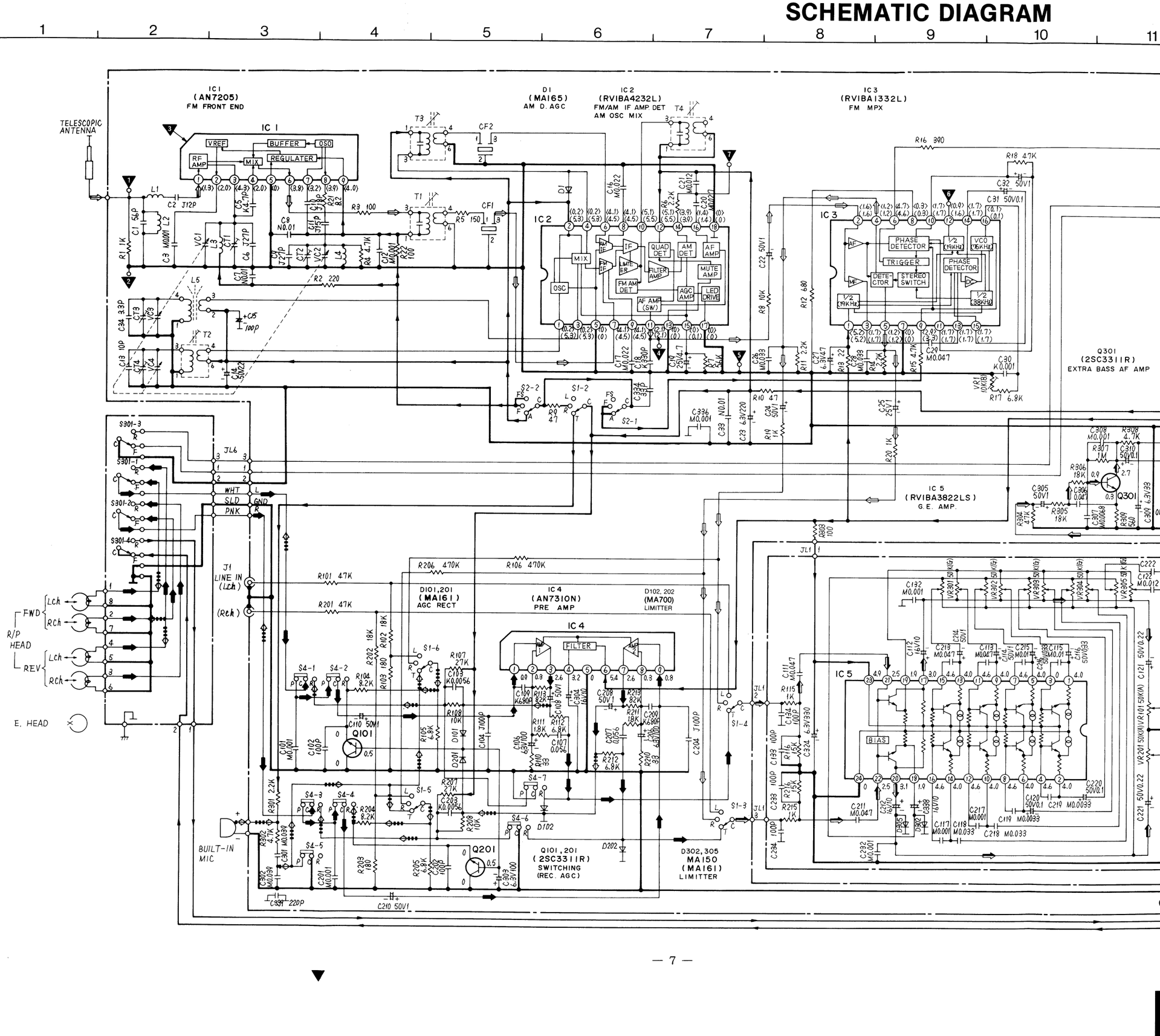
SCHEMATIC DIAGRAM

Note:

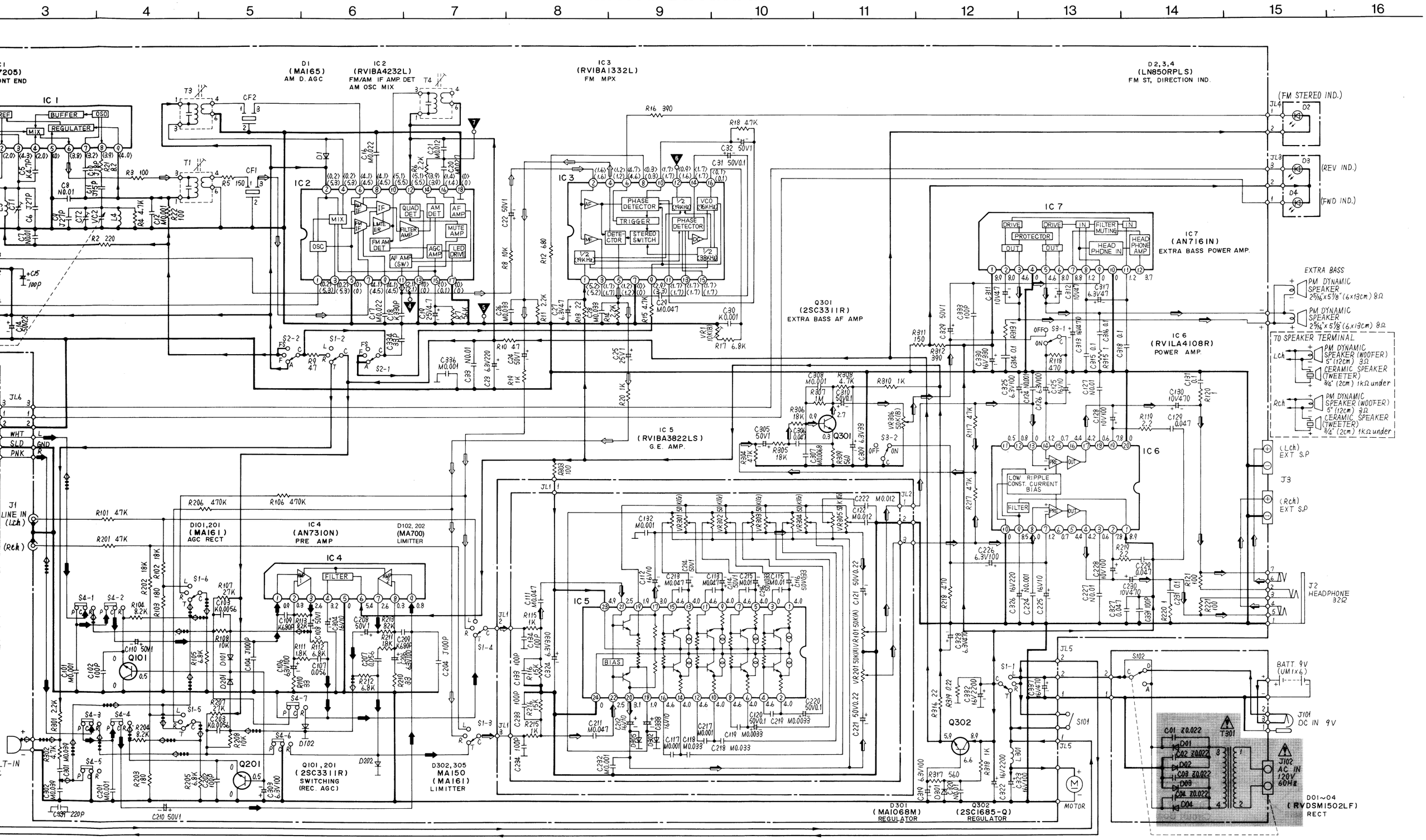
1. S1-1～S1-4: Function selector switch in "POWER OFF/TAPE" position.
   (T...POWER OFF/Tupe, R...Radio, L...LINE IN)
2. S2-1, S2-2: Band selector switch in "AM" position.
   (A...AM, F...FM, FS...FM ST)
3. S3-1, S3-2: XBS switch in "ON" position.
4. S4-1～S4-7: Record/Playback switch in "PLAY BACK" position.
   (P...Playback, R...Record)
5. S101: Motor switch in "OFF" position.
6. S102: AC/DC IN selector switch in "DC IN" position.
7. S301-1～ S301-4: Direction switch in "FORWARD" position.
   (1...Forward, 2...Reverse)
8. VR1: FM VCO adjustment VR.
9. VR101, VR201: Volume control VR.
10. VR301～ VR305: Graphic equalizer control VR.
11. VR306: Exera bass control VR.
12. Battery Current: No signal 130mA
    Maximum output radio.....2.2A
    Maximum output tape.....2.23A
13. Described is schematic diagram are two types of numbers; the supply parts number and production parts number for transistors and diodes.
    One type number is used for supply parts number and production parts number which they are identical.
    e.g. Q1
    2SC2412NRTB, LNSTB —— Production parts number
    [2SC2412] ———— Supply parts number
14. The mark (▼) shows test point. e.g. ▼=test point 1.
15. **Important safety notice. (⚠)**
    The shaded on this schematic diagram incorporates special features important for protection from fire and electrical shock hazards.
    When servicing it is essential that only manufacturer's specified parts be used for the critical components in the shaded areas of the schematic.
16. **The supply parts number is described alone in the replacement parts list.**
    - **This schematic diagram may be modified at any time with the development of new technology.**

+ (B) Voltage Line
Radio (FM) Signal Line
Tape (PLAYBACK) Signal Line
Tape (RECORD) Signal Line
Tape/Radio Signal Line

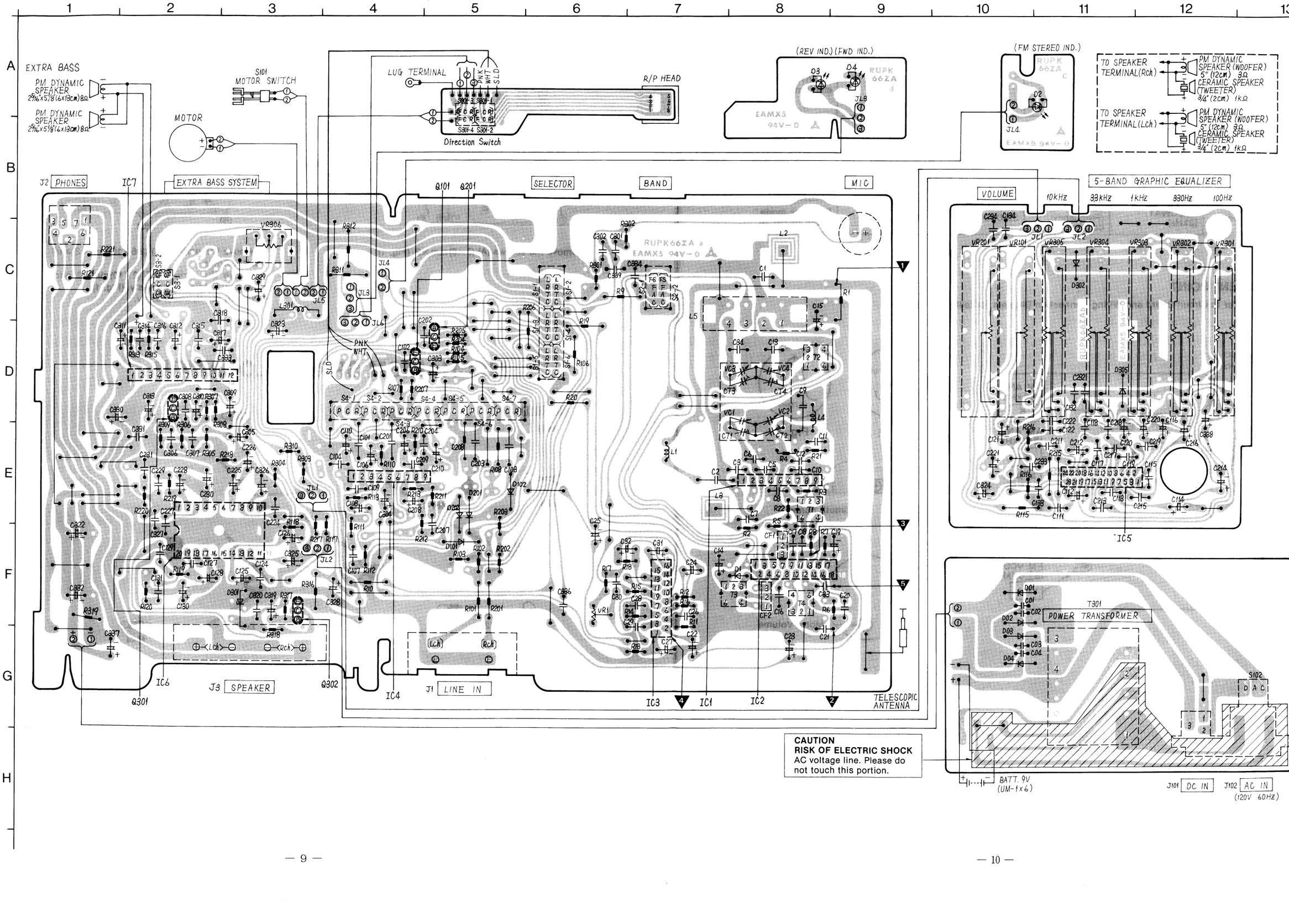
17. DC Voltage measurement are taken with electronics Voltmeter from negative terminal of battery.
    〈)...FM, ( )...AM,
    Nor mark...Tape (Playback)



SCHEMATIC DIAGRAM

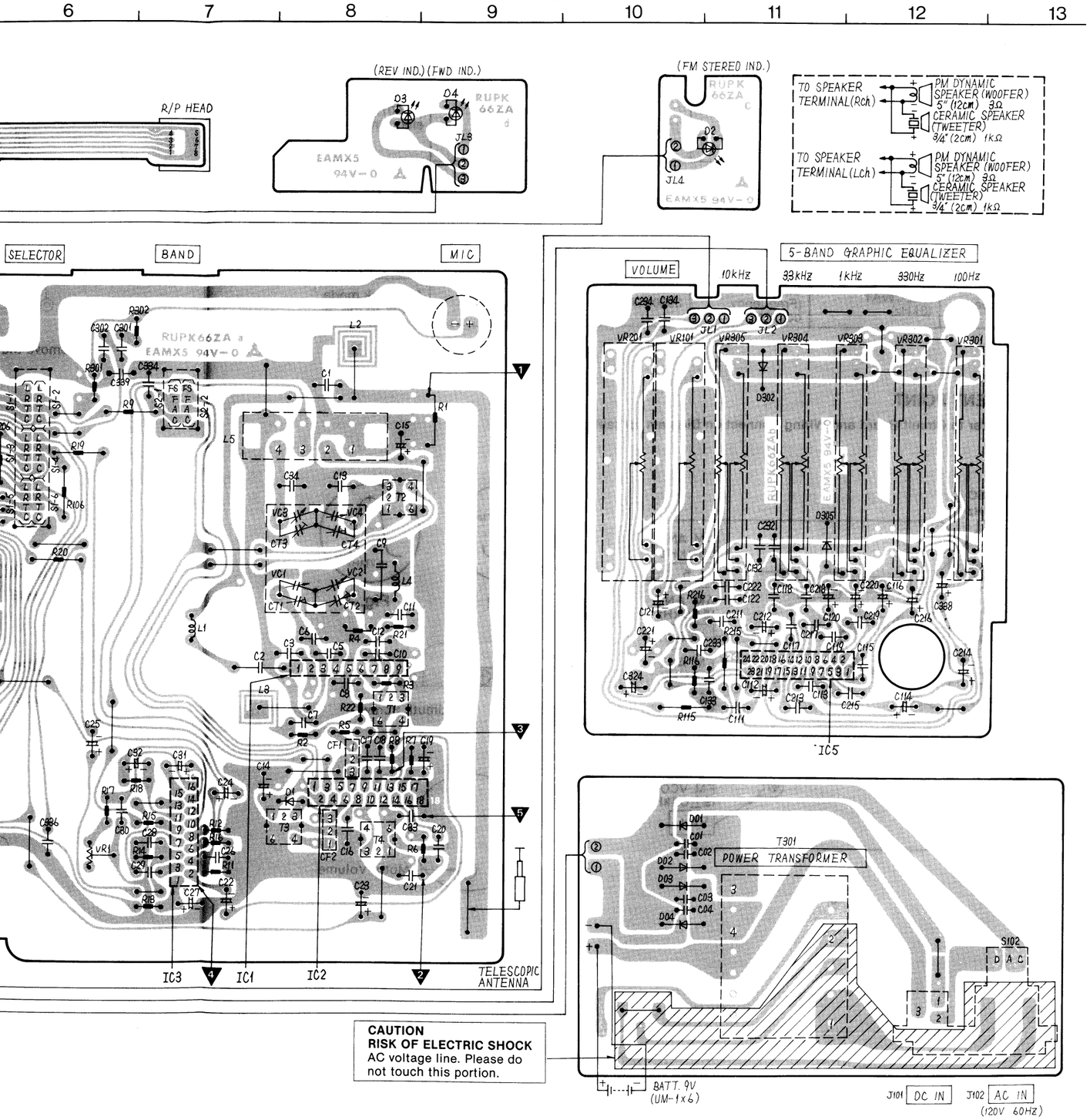


CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM



CAUTION
RISK OF ELECTRIC SHOCK
AC voltage line. Please do not touch this portion.

ARD AND WIRING CONNECTION DIAGRAM



CAUTION
RISK OF ELECTRIC SHOCK
AC voltage line. Please do not touch this portion.

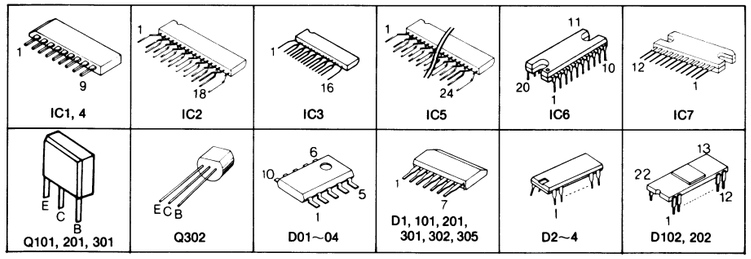
ELECTRICAL PARTS LIST

REPLACEMENT PARTS LIST

Important safety notice
Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

Ref. No.	Part No.	Part Name & Description
		INTEGRATED CIRCUITS
IC 1	**AN7205**	IC (FM FRONT END)
IC 2	**RViBA4232L**	IC (FM/AM IF AMP DET AM OSC, MIX)
IC 3	**RViBA1332L**	IC (MPX)
IC 4	**AN7310N**	IC (PRE AMP)
IC 5	**RViBA3822LS**	IC (G. EQUALIZER AMP)
IC 6	**RViLA4108R**	IC (POWER AMP)
IC 7	**AN7161N**	IC (EXTRA BASS POWER AMP)
		TRANSISTORS
Q 101, 201, 301	**2SC3311R**	Transistor (REC AGC, EXTRA BASS AF AMP)
Q 302	**2SC1685-Q**	Transistor (REGULATOR)
		DIODES & RECTIFIERS
D 01, 02, 03, 04	**RVDSM1502LF**	Diode (RECT)
D 1	**MA165**	Diode (AM D.AGC)
D 2, 3, 4	**LN850RPLS**	Diode (FM ST. DIRECTION IND)
D 101, 201, 302, 305	**MA161**	Diode (AGC RECT)
D 102, 202	**MA700**	Diode (LIMITTER)
D 301	**MA1068M**	Diode (REGULATOR)
		COILS
L 1	**RLQY25S8B**	Choke Coil
L 4	**RLD4Y53**	Oscillator Coil, FM
L 5	**RLF2C65**	Antenna Coil, AM
L 301	**RLQZB220K**	Choke Coil
		TRANSFORMERS
T 1, 4	**RLi4B153**	IFT, FM 1st, 2nd
T 2	**RL02B105**	Oscillator Coil, AM
T 3	**RLi2B458**	IFT, AM
T 301	**RLT5U3C2A**	Power Transformer ⚠

Ref. No.	Part No.	Part Name & Description
		VARIABLE CAPACITORS
VC 1, 2, 3, 4 (CT 1, 2, 3, 4)	**RCV4LC2R1A**	Variable Capacitor with Trimmer Capacitor
		VARIABLE RESISTORS
VR 1	**EVND4AA00B14**	Variable Resistor 10kΩ, (B) (VCO Adjustment)
VR 101, 201	**EWANFBC15A54**	Variable Resistor 50kΩ, (A) (Volume Control)
VR 301, 302, 303, 304, 305	**EWATA2C95G54**	Variable Resistor 50kΩ, (G) (Graphic Equalizer Control)
VR 306	**EVJGRAF20B54**	Variable Resistor 50kΩ, (B) (XBS Control)
		CERAMIC FILTERS
CF 1	**RVF107HRWMZ**	Ceramic Filter (10.7MHz)
CF 2	**RVFSFU455B**	Ceramic Filter (455kHz)
		SWITCHES
S 1	**RSS3F15Z**	Switch, Function
S 2	**RSS3B26Z**	Switch, Band
S 3	**RSH2B30Z**	Switch, XBS
S 4	**RSH2G02Y**	Switch, R/P
S 101	**RSH1A67Z**	Switch, Motor
S 301	**RSS2D26Z**	Switch, Direction
		JACKS
J 1	**RJF1099Z**	Jack, LINE IN
J 2	**RJJD7S2Z**	Jack, Headphones
J 3	**RJF1098Y**	Terminal, EXT SP
J 101, 102 (S 102)	**RJJ1F1Y**	Jack, AC/DC IN ⚠



RX-C38 RX-C38

MEASUREMENTS AND ADJUSTMENTS

■ ALIGNMENT INSTRUCTION

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT	
1. Set volume control to maximum. 2. Set graphic equalizer to center. 3. Set band switch to AM or FM, ST. 4. Set function selector to radio.	5. Extra bass switch to OFF. 6. Set power source voltage to 9V DC. 7. Output of signal generator should be no higher than necessary to obtain an output reading.

■ AM ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR CONNECTIONS	SIGNAL GENERATOR or SWEEP GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
		AM-IF ALIGNMENT					
(1)	AM	Fashion loop of several turns of wire and radiate signal into loop of receiver.	455kHz 30% Mod. at 400Hz	Point of non-interference. (on/about 600kHz)	Output meter across voice coil.	T3 (AM IFT)	Adjust for maximum output.
		AM-RF ALIGNMENT					
(2)	AM	〃	511kHz	Tuning capacitor fully closed.	〃	T2 (AM OSC Coil)	Adjust for maximum output.
(3)	AM	〃	1,670kHz	Tuning capacitor fully open.	〃	CT4 (AM OSC Trimmer)	〃
(4)	AM	〃	550kHz	Tune to signal.	〃	(＊1) L5 (AM ANT Coil)	Adjust for maximum output. Adjust L5 by moving coil bobbin along ferrite core.
(5)	AM	〃	1,500kHz	〃	〃	CT3 (AM ANT Trimmer)	Adjust for maximum output. Repeat steps (2)～(5).

(＊1) Cement antenna bobbin with wax after completing alignment.

■ FM ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR CONNECTIONS	SIGNAL GENERATOR or SWEEP GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
		FM-IF ALIGNMENT					
(1)	FM	High side thru. 0.001μF to test point ③. Negative side to test point ②.	10.7MHz (SWP.)	Point of non-interference. (on/about 90MHz)	Connect vert. amp. of scope to test point ④. Negative side to test point ⑤.	T1 (FM 1st IFT)	Adjust for maximum amplitude. (Refer to fig. 2.)
(2)	FM	〃	〃	〃	〃	T4 (FM 2nd IFT)	Adjust for maximum amplitude. (Refer to fig. 3.)
		FM-RF ALIGNMENT					
(3)	FM	Connect to test point ① through FM dummy antenna. Negative side to test point ②.	86.2MHz	Variable capacitor fully closed.	Output meter across voice coil.	L4 (FM OSC Coil)	(＊2) Adjust for maximum output.
(4)	FM		109.2MHz	Variable capacitor fully open.	〃	CT2 (FM OSC Trimmer)	〃
(5)	FM		106MHz	〃	〃	CT1 (FM ANT Trimmer)	(＊2) Adjust for maximum output. Repeat steps (3)～(5).

(＊2) Three output responses will be present; proper tuning is the center frequency.

■ SEPARATION ALIGNMENT

ITEM	FM SIGNAL GENERATOR SOURCE CONNECTION	EQUIPMENT CONNECTION ELECTRONICS COUNTER	ADJUSTMENT	SPECIFICATION	REMARKS
Adjustment of pilot signal.	98MHz, 60dB (CW) Connect to test point ① through FM dummy antenna. Negative side to test point ②.	⑤...(+) ⑥...(−)	VR1	19kHz	Adjust VR1, for 19kHz (±100Hz) reading on electronics counter.

■ TAPE ADJUSTMENT

ITEM	INPUT	MEASUREMENT POINT	SPECIFICATION	ADJUSTMENT POINT	REMARKS
Azimuth	QZZCFM (8kHz, −20dB)	SP OUT (AC voltmeter & Oscilloscope)	Maximum output.	Azimuth screw	Playback mode (Refer to Fig. 4)
Tape speed	QZZCWAT (3kHz)	SP OUT (Frequency counter)	3000±90Hz	Motor Volume	Playback mode (Refer to Fig. 5)

■ ALIGMENT POINT

＊ Please refer to Circuit Board and Wiring Connection Diagram for test point locations.

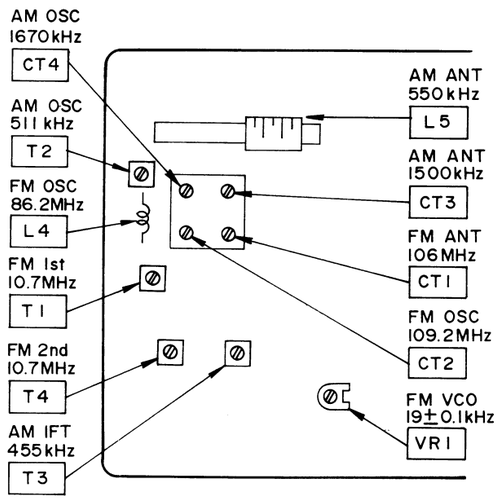


Fig. 1

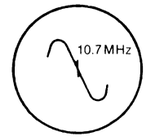


Fig. 2

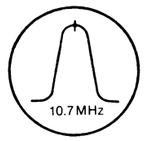


Fig. 3

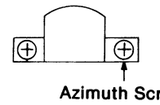


Fig. 4

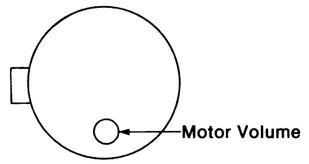


Fig. 5

■ SEPARATION ALIGNMENT

ITEM	FM SIGNAL GENERATOR SOURCE CONNECTION	EQUIPMENT CONNECTION ELECTRONICS COUNTER	ADJUSTMENT	SPECIFICATION	REMARKS
Adjustment of pilot signal.	98MHz, 60dB (CW) Connect to test point ▼1 through FM dummy antenna. Negative side to test point ▼2.	▼1...(+) ▼2...(−)	VR1	19kHz	Adjust VR1, for 19kHz (±100Hz) reading on electronics counter.

■ TAPE ADJUSTMENT

ITEM	INPUT	MEASUREMENT POINT	SPECIFICATION	ADJUSTMENT POINT	REMARKS
Azimuth	QZZCFM (8kHz, −20dB)	SP OUT (AC voltmeter & Oscilloscope)	Maximum output.	Azimuth screw	Playback mode (Refer to Fig. 4)
Tape speed	QZZCWAT (3kHz)	SP OUT (Frequency counter)	3000±90Hz	Motor Volume	Playback mode (Refer to Fig. 5)

■ ALIGMENT POINT

* Please refer to Circuit Board and Wiring Connection Diagram for test point locations.

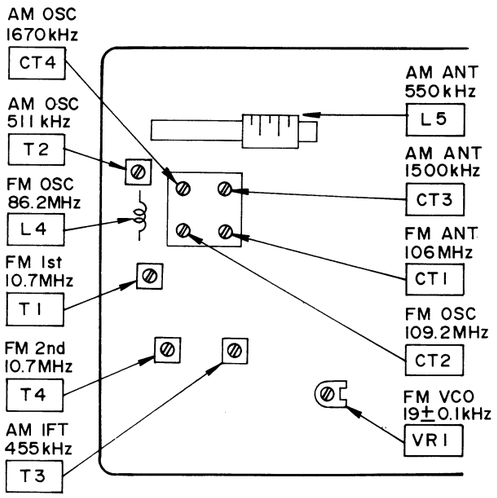


Fig. 1

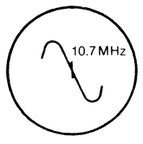


Fig. 2

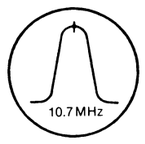


Fig. 3

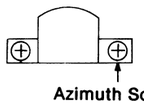


Fig. 4

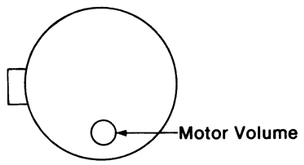
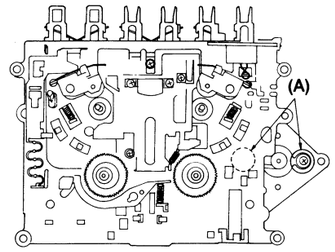


Fig. 5

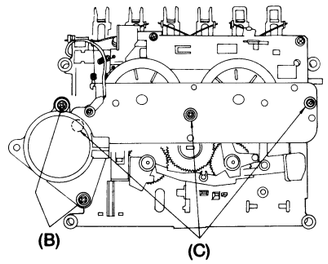
DISASSEMBLY INSTRUCTIONS OF MECHANISM MAIN PARTS

■ HOW TO REMOVE THE MOTOR



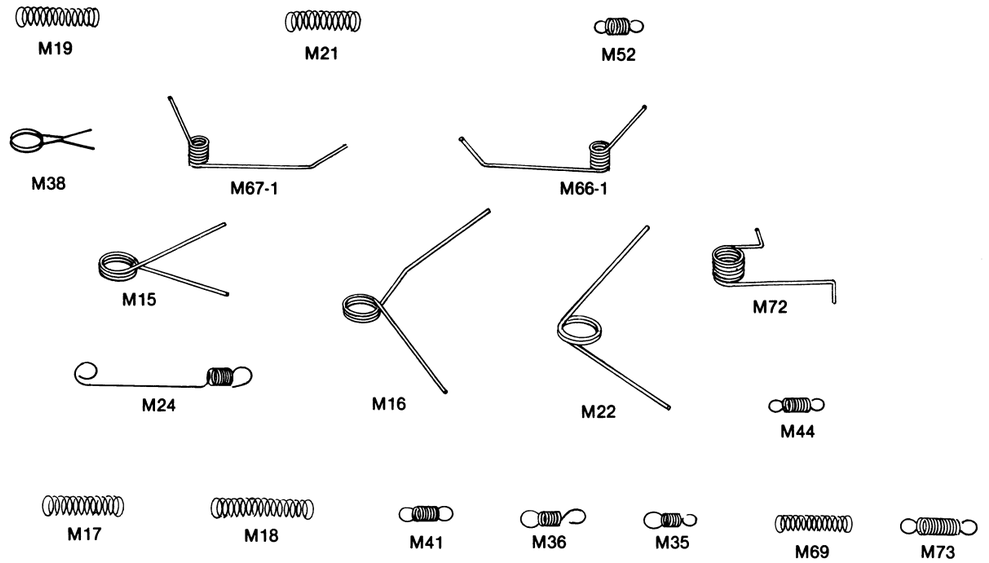
Remove the screws (A) (3×6)mm×2. (Fig. 1)

■ HOW TO REMOVE THE FLYWHEEL ASS'Y

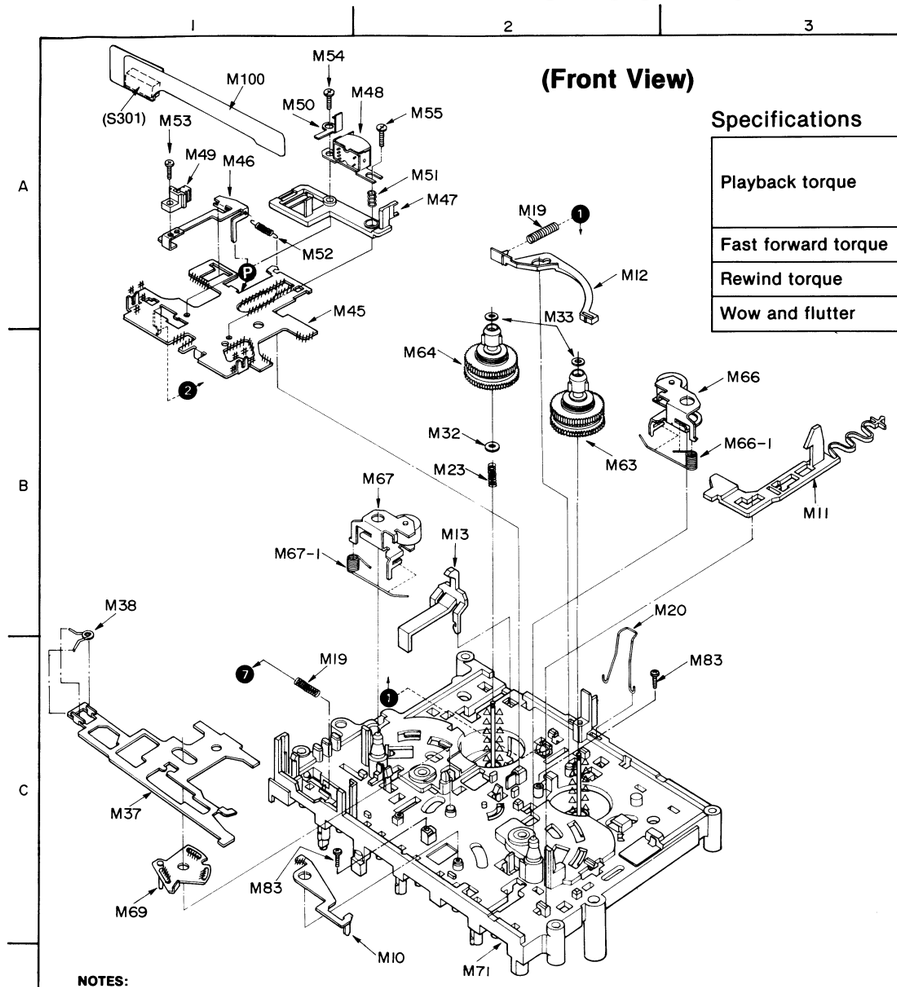


- Remove the screws (B) (2.6×10)mm×2 and Motor Angle.
- Remove the screws (C) (2×10)mm×3 and flywheel holding plate ass'y. (Fig. 1)
- Pull out the flywheel ass'y.

MECHANISM SPRING LOCATION



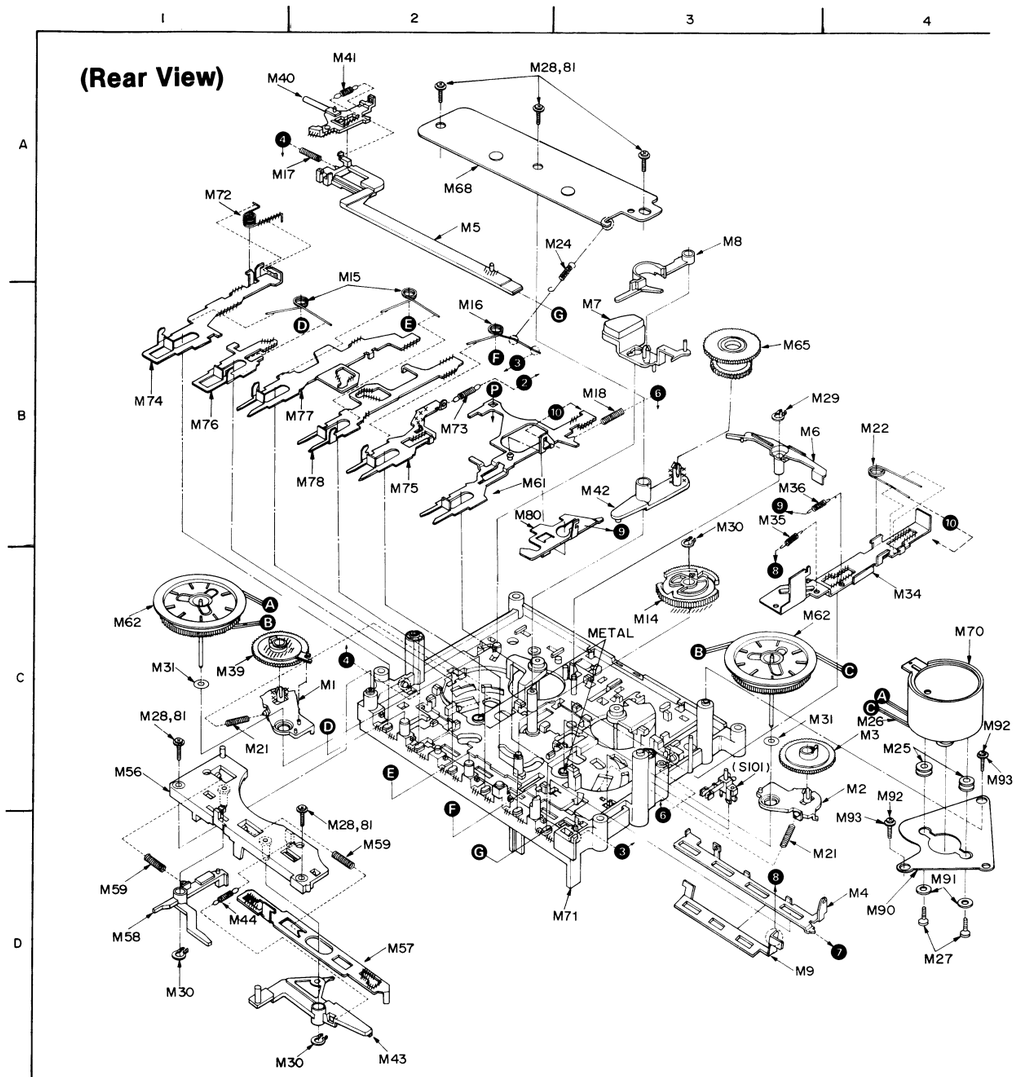
MECHANISM PARTS LOCATION

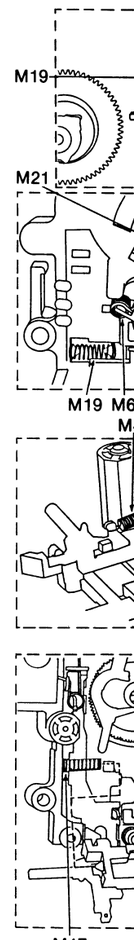


Specifications

Playback torque	30^{+15}_{-5} g · cm (FWD and REV mode)
Fast forward torque	80±20g · cm
Rewind torque	80±20g · cm
Wow and flutter	0.3% (WRMS)

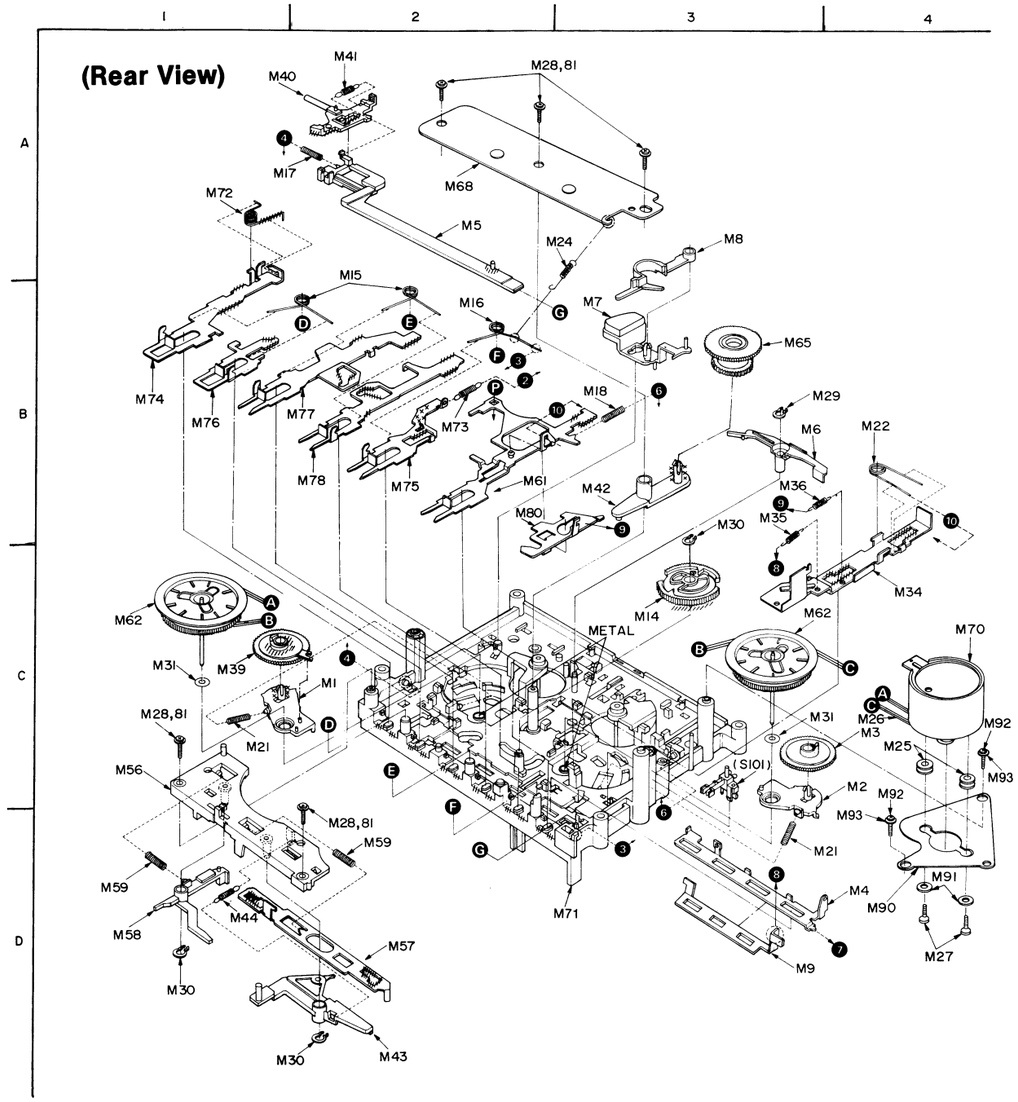
NOTES:
When changing mechanism parts, apply the specified grease to the area marked show in the drawing "Mechanism Parts Location".
- " " mark ..... Molytone (Lubricating grease) (RZZ0L07)
- "△△" mark ..... Dynamic (Lubricating grease) (RZZ0L05)
- " ## " mark (Obrique Lines) ..... Rocol Paste (Lubricating grese) (RZZ0L06)





| | | |

30^{+15}_{-5} g · cm (FWD and REV mode)
80±20g · cm
80±20g · cm
0.3% (WRMS)



| | | |

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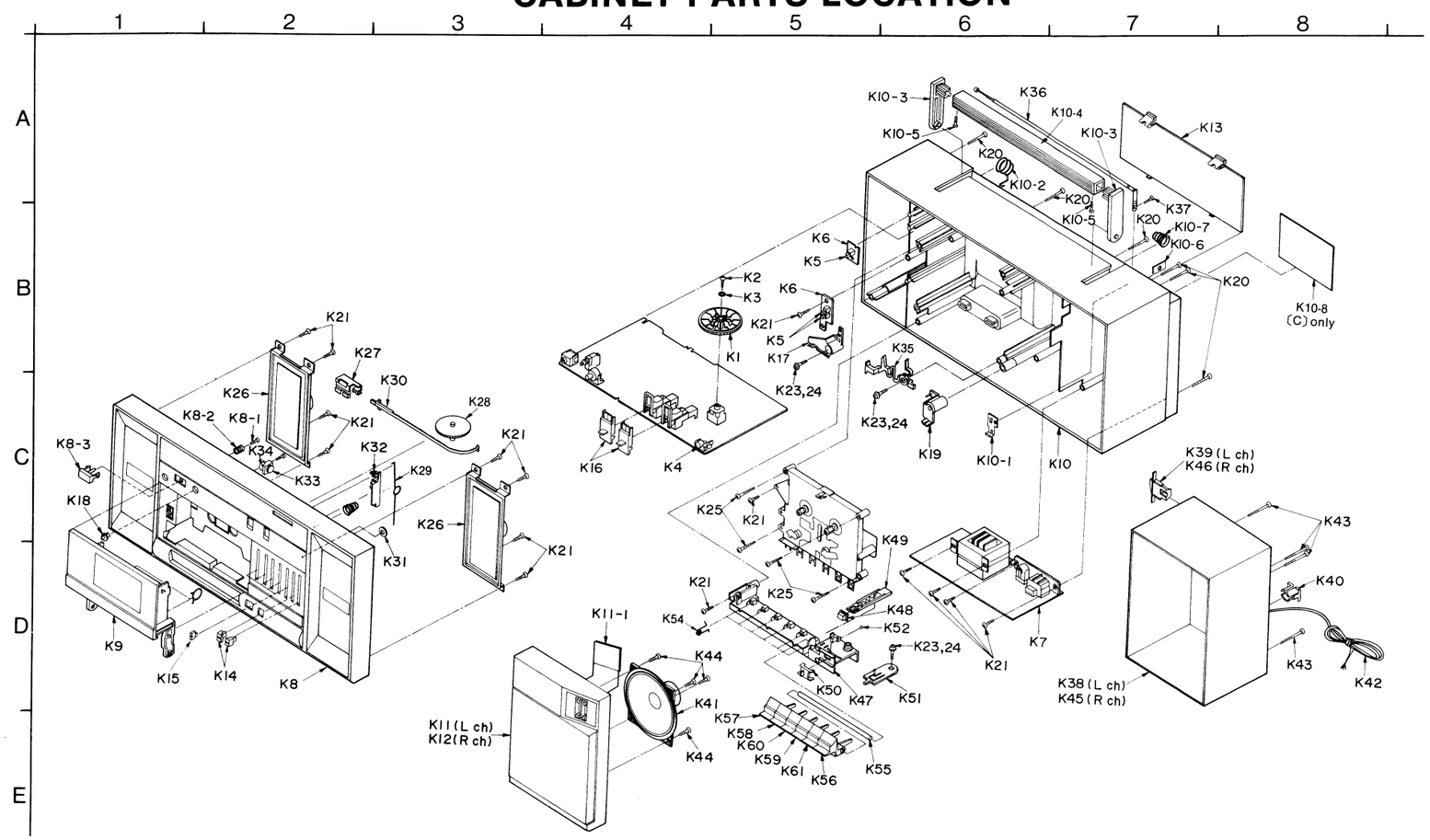
CABINET PARTS LOCATION



REPLACEMENT PARTS LIST

Important safety notice
Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

The letter in the circle after the part name indicates the color of the part.
Ⓚ...Black, Ⓢ...Silver, Ⓦ...White, Ⓡ...Red
(M)...For U.S.A.
(C)... For Canada.

Ref. No.	Part No.	Part Name & Description
		CABINET PARTS
K 1	**RDG5739Z**	Gear, Drum
K 2	**XSN26 + 6**	Screw ⊕2.6×6 (Drum Gear M'tg)
K 3	**XWA2B**	Washer (Drum Gear M'tg)
K 4	**RJM164Z**	Built-in Microphone
K 5	**RHRK512Z**	Holder, LED
K 6	**RUPK66Z**	Circuit Board (LED)
K 7	**RUPK67Z**	Circuit Board (POWER) ⚠
K 8	**RYM1XC38M**	Front Cabinet Ass'y Ⓚ
K 8-1	**RHRK513Z**	Stopper (XBS Button)
K 8-2	**RUQK20Z**	Spring (XBS Button)
K 8-3	**RBEK3Z**	Button, XBS
K 9	**RYQXC38M**	Cassette Lid Ass'y Ⓚ
K 10 (M)	**RYFXC38M**	Rear Cabinet Ass'y Ⓚ
K 10 (C)	**RYFXC38MC**	Rear Cabinet Ass'y Ⓚ (For Canada)
K 10-1	**RJTK304Z**	Terminal, Antenna
K 10-2	**RJCK91001Z**	Terminal, Battery +/−
K 10-3	**RKXK7Z**	Arm, Handle Ⓚ
K 10-4	**RKXK8Z**	Handle Ⓚ
K 10-5	**XTS3 + 10GZ**	Screw ⊕3×10 (Handle M'tg)
K 10-6	**QJB0111**	Terminal, Battery +
K 10-7	**QBN8009**	Spring (Battery −)
K 10-8 (C)	**RGTK34Z**	Name Plate (For Canada)
K 11	**RYM2XC38M**	Speaker Grille Ass'y (Lch) Ⓚ
K 11-1	**RWEXC38M**	Tweeter Ass'y (L, Rch)
K 12	**RYM3XC38M**	Speaker Grille Ass'y (Rch) Ⓚ
K 13	**RKKK5Z**	Battery Cover Ⓚ
K 14	**RBDK15Z**	Knob, Volume Ⓢ
K 15	**RBDK16Z**	Knob, Graphic Equalizer Ⓢ
K 16	**RBDK17Z**	Knob, Function, Band Ⓚ
K 17	**RNLK37Z**	Lever, Record
K 18	**RBNK4Z**	Knob, XBS Volume Ⓚ
K 19	**RNLK36Z**	Lever (B), Reverse
K 20	**XTN3 + 50G**	Screw ⊕3×5 (Front Cabinet Ass'y)
K 21	**XTV3 + 10G**	Screw ⊕3×10 (Mechanism, Circuit Board etc. M'tg)
K 23	**XTN3 + 10B**	Screw ⊕3×10 (Record Lever M'tg +
K 24	**XWG3**	Washer (Record Lever M'tg)
K 25	**XTN3 + 25G**	Screw ⊕3×25 (Mechanism M'tg)
K 26	**EAS15S05A**	Speaker (XBS)
K 27	**RDPK510Z**	Dial Pointer Ⓦ
K 28	**RBTK4Z**	Knob, Tuning Ⓢ
K 29	**RUWK24Z**	Spring (Cassette Lid)
K 30	**RDE142Y**	Rack (Dial Pointer)
K 31	**RHG720Z**	Rubber (Microphone)
K 32	**RNLK38Z**	Lever, Eject
K 33	**RDG5700Z**	Gear, Eject
K 34	**RME361Z**	Holder, Eject Gear
K 35	**RNLK34Z**	Lever (B), Direction
K 36	**XEARR225CAY**	Telescopic Antenna
K 37	**XSN3 + 12S**	Screw ⊕3×12 (Telescopic Antenna M'tg)
K 38	**RKFK14Z**	Speaker Box (Lch)
K 39	**RGE76Y**	Stopper (Speaker Lch)
K 40	**RHR171Z**	Holder (Speaker Cord L, Rch)
K 41	**EAS12P233V**	Speaker (Woofer)
K 42	**RJEK1Z**	Speaker Cord
K 43	**XTN3 + 40G**	Screw ⊕3×40 (Speaker Box M'tg)
K 44	**XTV3 + 8G**	Screw ⊕3×8 (Speaker M'tg)
K 45	**RKFK12Z**	Speaker Box (Rch) Ⓚ
K 46	**RGE76X**	Stopper (Speaker Rch)
K 47	**RUAK17Z**	Chassis, Mechanism Button
K 48	**RBEK2Z**	Button, Direction
K 49	**RNLK33Z**	Lever (A), Direction
K 50	**RBDK18Z**	Knob, Reverse Mode
K 51	**RNLK36Z**	Lever (A), Reverse
K 52	**QDK1012**	Steel Ball
K 54	**RUWK33Z**	Spring (Mechanism Button)
K 55	**RDFK3003Z**	Shaft (Mechanism Button)
K 56	**RBCK82Z**	Button, Pause
K 57	**RBCK77Z**	Button, Record
K 58	**RBCK78Z**	Button, Playback
K 59	**RBCK80Z**	Button, Fast (Forward)
K 60	**RBCK79Z**	Button, Fast (Rewind)
K 61	**RBCK81Z**	Button, Stop/Eject
		ACCESSORIES
A 1 (M)	**RJA22X**	AC Power Cord (For U.S.A.) ⚠
A 1 (C)	**RJA95Z**	AC Power Cord (For Canada) ⚠
A 2 (M)	**RQXK4044Z**	Operating Instructions (For U.S.A.)
A 2 (C)	**RQXK4048Z**	Operating Instruction (For Canada)
		PACKINGS
P 1 (M)	**RPKK1045Z**	Gift Box (For U.S.A.)
P 1 (C)	**RPKK1051Z**	Gift Box (For Canada)
P 2	**RPNK9008Z**	Pad (A)
P 3	**RPEK118Z**	Polyethylene Cover
P 4	**QPAK1150**	Pad (B)

CAPACITORS AND RESISTORS

ELECTRICAL PARTS LIST

Numbering System of Resistor

Example

ERD	25	F	J	101
Type	Wattage	Shape	Tolerance	Value (100Ω)
ERX	2	AN	J	2R2
Type	Wattage	Shape	Tolerance	Value (2.2Ω)

Resistor Type	Wattage	Tolerance
ERD: Carbon	10 : 1/8 W	J : ±5%
ERG: Metal Film	12 : 1/2 W	
ERX: Metal Film	25 : 1/4 W	
ERQ: Fuse Type Metal	1 : 1 W	
RRD: Carbon (Chip Type)	18 : 1/8 W	

Numbering System of Capacitor

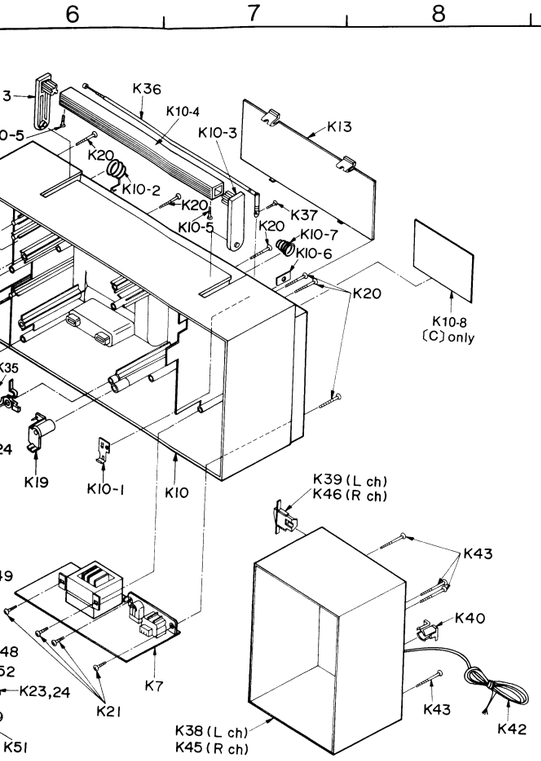
Example

ECKD	1H	102	Z	F
Type	Voltage	Value (1000 pF)	Tolerance	Peculiarity
ECEA	50	M	R47	
Type	Voltage	Peculiarity	Value (0.47 μF)	

Capacitor Type	Voltage: ECEA Type	Voltage: Other	Tolerance
ECEA: Electrolytic	0J : 6.3 V	2H : 500 V DC	C : ±0.25 pF
ECCD: Ceramic	1A : 10 V	1 : 100 V	J : ±5%
ECKD: Ceramic	1C : 16 V	DKC : 400 V AC	K : ±10%
ECQM: Polyester	1E : 25 V		Z : +80%, −20%
	1H : 50 V		
ECQP: Polypropylene	1V : 35 V		P : +100%, −0%
	50 : 50 V		
ECET: Electrolytic			
ECEA□□□N: Non Polar Electrolytic	25 : 25 V		
	16 : 16 V		
QCU □: Ceramic (Chip Type)			
ECUX: Ceramic (Chip Type)			

Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.
	CAPACITORS	C 103, 203	**ECBT1H562MX**	R 3, 22, 303	**ERD16TJ101**
		C 104, 204, 331	**RCBS1H101KB**	R 4, 15, 302, 308	**ERD16TJ472**
C 01, 02, 03, 04	**ECKF1H223ZF**	C 106, 126, 206, 226, 303, 325	**ECEA0JU101**	R 5	**ERD16TJ151**
C 1	**RCBS1H560JL**	C 107, 207	**ECFT1C563MD**	R 6, 11, 14, 301	**ERD16TJ222**
C 2	**ECBT1H120JC**	C 109, 209	**RCBS1H681KB**	R 7	**ERD16TJ563**
C 3, 12, 102, 117, 124, 132, 134, 202, 217, 224, 232, 234, 308, 336	**RCBS1H102KB**	C 112, 212, 338	**ECEA1CK100**	R 8	**ERD16TJ103**
				R 9, 10	**ERD25FJ470**
		C 114, 214	**ECEA1HKR010**	R 12	**ERD16TJ681**
		C 115, 215	**RCBS1C103MY**		
		C 116, 216	**ECEA1HKR33**	R 13	**ERD16TJ220**
C 5	**RCBS1H4R7KL**	C 119, 219	**RCBS1C332MX**	R 16	**ERD16TJ391**
C 6	**RCBS1H270JL**	C 120, 220	**ECEA1HK0R1**	R 17, 105, 112, 205, 212	**ERD16TJ682**
C 7, 8, 33, 127, 227, 320	**RCBS1C103NX**	C 121, 221	**ECEA1HKR22**		
C 9	**ECBT1H200JC**	C 122, 222	**ECFT1C123MD**	R 18, 117, 217, 304	**ERD16TJ473**
C 10	**RCBS1H180JL**	C 125, 225, 304, 330	**ECEA1CU100**	R 21	**ERD16TJ8R2**
C 11	**RCBS1H150JL**	C 128, 228, 319	**ECEA1AU101**	R 101, 201	**ERD25TJ473**
C 13	**RCBS1H100JL**	C 130, 230	**ECEA1AU471**	R 102, 202, 305, 306	**ERD16TJ183**
C 14	**ECEA1HU2R2**				
C 15	**RCBS1H101KB**	C 131, 231, 314, 315, 316, 318	**ECQV1H104JZ**	R 103, 203	**ERD16TJ181**
C 16, 17	**ECFT1C223MD**			R 104, 204	**ERD16TJ822**
		C 133, 233, 333	**RCBS1H101K**	R 106, 206	**ERD25TJ474**
C 18	**RCBS1H331KB**	C 301	**ECFT1C393MD**		
C 19	**ECEA1EU4R7**	C 307	**RCBS1C682MX**	R 107, 207	**ERD16TJ273**
C 20	**ECFT1C273MD**	C 309	**ECEA0JU330**	R 108, 208	**ERD25FJ103**
C 21	**ECFT1C123MD**	C 311, 312	**ECEA1AU470**	R 110, 210	**ERD16TJ330**
C 22, 24, 25, 32, 108, 110, 208, 210, 305, 329	**ECEA1HU010**	C 313	**ECEA1CU471**	R 111, 211	**ERD16TJ182**
		C 322, 332	**ECEA1CU222**	R 113, 213	**ERD16TJ823**
		C 323	**ECEA1CU101**	R 116, 216	**ERD16TJ153**
		C 324	**ECEA0JK331**	R 118, 218	**ERD16TJ471**
C 23	**ECEA0JU221**			R 119, 219	**ERD16TJ2R2**
C 26, 28, 118, 218	**ECFT1C333MD**	C 326	**ECEA1CU221**	R 120, 220, 313, 315	**ERD16TJ1R0**
		C 328	**ECEA0JU471**		
C 27, 317	**ECEA0JU470**	C 330, 337	**ECEA1CU331**	R 121, 221	**ERD25FJ101**
C 29, 111, 113, 129, 211, 213, 229, 306, 327	**ECFT1C473MD**	C 334, 335	**RCBS1H330**		
		C 339	**RCBS1H221KB**	R 307	**ERD16TJ105**
				R 310, 318	**ERD16TJ102**
			RESISTORS	R 311	**ERD25FJ151**
C 30	**ECQM1H102KV**			R 312	**ERD25FJ391**
C 31, 310	**ECEA1HU0R1**	R 1, 19, 20, 115, 215	**ERD25FJ102**	R 316	**ERD25FJ220**
C 34	**RCBS1H3R3**	R 2	**ERD16TJ221**	R 317	**ERD16TJ561**
C 101, 201	**ECBT1H102M**			R 319	**ERX12ANJR22**

ATION



rt Name & Description	Ref. No.	Part No.	Part Name & Description
Pointer Ⓦ	K 57	**RBCK77Z**	Button, Record
, Tuning Ⓢ	K 58	**RBCK78Z**	Button, Playback
	K 59	**RBCK80Z**	Button, Fast (Forward)
g (Cassette Lid)			
(Dial Pointer)	K 60	**RBCK79Z**	Button, Fast (Rewind)
er (Microphone)	K 61	**RBCK81Z**	Button, Stop/Eject
, Eject			
Eject		**ACCESSORIES**	
er, Eject Gear			
(B), Direction	A 1 (M)	**RJA22X**	AC Power Cord (For U.S.A.) ⚠
copic Antenna	A 1 (C)	**RJA95Z**	AC Power Cord (For Canada) ⚠
w ⊕3×12 (Telescopic	A 2 (M)	**RQXK4044Z**	Operating Instructions (For U.S.A.)
nna M'tg)	A 2 (C)	**RQXK4048Z**	Operating Instruction (For Canada)
ker Box (Lch)			
		PACKINGS	
ber (Speaker Lch)			
er (Speaker Cord L, Rch)	P 1 (M)	**RPKK1045Z**	Gift Box (For U.S.A.)
ker (Woofer)	P 1 (C)	**RPKK1051Z**	Gift Box (For Canada)
ker Cord	P 2	**RPNK9008Z**	Pad (A)
w ⊕3×40	P 3	**RPEK118Z**	Polyethylene Cover
aker Box M'tg)	P 4	**QPAK1150**	Pad (B)
w ⊕3×8 (Speaker M'tg)			
ker Box (Rch) Ⓚ			
ber (Speaker Rch)			
sis, Mechanism Button			
n, Direction			
(A), Direction			
, Reverse Mode			
(A), Reverse			
Ball			
g (Mechanism Button)			
(Mechanism Button)			
n, Pause			

CAPACITORS AND RESISTORS

ELECTRICAL PARTS LIST

Numbering System of Resistor

Example

ERD	25	F	J	101
Type	Wattage	Shape	Tolerance	Value (100Ω)
ERX	2	AN	J	2R2
Type	Wattage	Shape	Tolerance	Value (2.2Ω)

Resistor Type	Wattage Tolerance
ERD: Carbon	10 : ⅛ W J : ±5%
ERG: Metal Film	12 : ½ W
ERX: Metal Film	25 : ¼ W
ERQ: Fuse Type Metal	1 : 1 W
RRD: Carbon (Chip Type)	18 : ⅛ W

Numbering System of Capacitor

Example

ECKD	1H	102	Z	F
Type	Voltage	Value (1000 pF)	Tolerance	Peculiarity
ECEA	50	M	R47	
Type	Voltage	Peculiarity	Value (0.47 µF)	

Capacitor Type	Voltage		Tolerance
	ECEA Type	Other	
ECEA: Electrolytic	0J : 6.3 V	2H : 500 V DC	C : ±0.25 pF
ECCD: Ceramic	1A : 10 V	1 : 100 V	J : ±5%
ECKD: Ceramic	1C : 16 V	DKC : 400 V AC	K : ±10%
ECQM: Polyester	1E : 25 V		Z : +80%, −20%
	1H : 50 V		
ECQP: Polypropylene	1V : 35 V		P : +100%, −0%
	50 : 50 V		
ECET: Electrolytic			
ECEA□□□N: Non Polar Electrolytic	25 : 25 V		
	16 : 16 V		
QCU □: Ceramic (Chip Type)			
ECUX: Ceramic (Chip Type)			

Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.
CAPACITORS		C 103, 203	**ECBT1H562MX**	R 3, 22, 303	**ERD16TJ101**
		C 104, 204, 331	**RCBS1H101KB**	R 4, 15, 302, 308	**ERD16TJ472**
C 01, 02, 03, 04	**ECKF1H223ZF**	C 106, 126, 206, 226, 303, 325	**ECEA0JU101**	R 5	**ERD16TJ151**
C 1	**RCBS1H560JL**	C 107, 207	**ECFT1C563MD**	R 6, 11, 14, 301	**ERD16TJ222**
C 2	**ECBT1H120JC**	C 109, 209	**RCBS1H681KB**	R 7	**ERD16TJ563**
C 3, 12, 102, 117, 124, 132, 134, 202, 217, 224, 232, 234, 308, 336	**RCBS1H102KB**	C 112, 212, 338	**ECEA1CK100**	R 8	**ERD16TJ103**
				R 9, 10	**ERD25FJ470**
		C 114, 214	**ECEA1HKR010**	R 12	**ERD16TJ681**
		C 115, 215	**RCBS1C103MY**		
		C 116, 216	**ECEA1HKR33**	R 13	**ERD16TJ220**
C 5	**RCBS1H4R7KL**	C 119, 219	**RCBS1C332MX**	R 16	**ERD16TJ391**
C 6	**RCBS1H270JL**	C 120, 220	**ECEA1HK0R1**	R 17, 105, 112, 205, 212	**ERD16TJ682**
C 7, 8, 33, 127, 227, 320	**RCBS1C103NX**	C 121, 221	**ECEA1HKR22**		
C 9	**ECBT1H200JC**	C 122, 222	**ECFT1C123MD**	R 18, 117, 217, 304	**ERD16TJ473**
C 10	**RCBS1H180JL**	C 125, 225, 304, 330	**ECEA1CU100**	R 21	**ERD16TJ8R2**
C 11	**RCBS1H150JL**	C 128, 228, 319	**ECEA1AU101**	R 101, 201	**ERD25TJ473**
C 13	**RCBS1H100JL**	C 130, 230	**ECEA1AU471**	R 102, 202, 305, 306	**ERD16TJ183**
C 14	**ECEA1HU2R2**			R 103, 203	**ERD16TJ181**
C 15	**RCBS1H101KB**	C 131, 231, 314, 315, 316, 318	**ECQV1H104JZ**	R 104, 204	**ERD16TJ822**
C 16, 17	**ECFT1C223MD**	C 133, 233, 333	**RCBS1H101K**	R 106, 206	**ERD25TJ474**
C 18	**RCBS1H331KB**	C 301	**ECFT1C393MD**		
C 19	**ECEA1EU4R7**	C 307	**RCBS1C682MX**	R 107, 207	**ERD16TJ273**
C 20	**ECFT1C273MD**	C 309	**ECEA0JU330**	R 108, 208	**ERD25FJ103**
C 21	**ECFT1C123MD**	C 311, 312	**ECEA1AU470**	R 110, 210	**ERD16TJ330**
C 22, 24, 25, 32, 108, 110, 208, 210, 305, 329	**ECEA1HU010**	C 313	**ECEA1CU471**	R 111, 211	**ERD16TJ182**
		C 322, 332	**ECEA1CU222**	R 113, 213	**ERD16TJ823**
		C 323	**ECEA1CU101**	R 116, 216	**ERD16TJ153**
C 23	**ECEA0JU221**	C 324	**ECEA0JK331**	R 118, 218	**ERD16TJ471**
C 26, 28, 118, 218	**ECFT1C333MD**	C 326	**ECEA1CU221**	R 119, 219	**ERD16TJ2R2**
C 27, 317	**ECEA0JU470**	C 328	**ECEA0JU471**	R 120, 220, 313, 315	**ERD16TJ1R0**
C 29, 111, 113, 129, 211, 213, 229, 306, 327	**ECFT1C473MD**	C 330, 337	**ECEA1CU331**	R 121, 221	**ERD25FJ101**
		C 334, 335	**RCBS1H330**		
		C 339	**RCBS1H221KB**	R 307	**ERD16TJ105**
C 30	**ECQM1H102KV**			R 310, 318	**ERD16TJ102**
C 31, 310	**ECEA1HU0R1**	**RESISTORS**		R 311	**ERD25FJ151**
C 34	**RCBS1H3R3**			R 312	**ERD25FJ391**
C 101, 201	**ECBT1H102M**	R 1, 19, 20, 115, 215	**ERD25FJ102**	R 316	**ERD25FJ220**
		R 2	**ERD16TJ221**	R 317	**ERD16TJ561**
				R 319	**ERX12ANJR22**

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Parts Change Notice

This is the Service Manual for the following areas.
ME ···For AAFES EUROPE.
MF ···For AAFES PACIFIC.

Model No. RX-C38

(ORDER NO. GAD8606581A4)

Please revise the original parts list in the Service Manual to conform to the change(s) shown herein. If new part numbers are shown, be sure to use then ordering parts.

Reason for Change

*The circled item indicates the reason. If no marking, see the Notes in the bottom column.

1. Improve performance	
2. Change of material or dimension	
3. To meel approved specification	
4. Standardization	
5. Addition	
6. Deletion	
⑦ Correction	
8. Other	

Interchangeability Code

**The circled item Indicates the interchangeability. If no marking, see the Notes in the bottom column.

	Parts		Set Production	
A	Original	⤫	Early	Original or new parts may be used in early or late production set.
	New		Late	Use original parts until exhausted, then stock new parts.
B	Original	→	Early	Original parts may be used in early production sets only. New parts may be used in early or late production sets. Use original parts where possible, then stock new parts.
	New	↗	Late	
C	Original	↗	Early	New parts only may be used in early or late production sets.
	New	→	Late	Stock new parts.
D	Original	→	Early	Original parts may be used in early production sets only. New parts may be used in late production sets only. Stock both original and new parts.
	New	→	Late	
Ⓔ	Other			

Part Number

Model No.	Ref. No.	Original Part No.	New Part No.	Notes	Part Name & Description	Price
	K19	RNLK35ZA	RNLK36Z	7-E	Lever(B), Reverse	
	K51	RNLK36Z	RNLK35Z	7-E	Lever(A), Reverse	

File this Parts Change Notice with your copy of the Service Manual.

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